



Validating Email Addresses With a Filter

 by [harsh_beria93](#)

Problem

Submissions

Leaderboard

Discussions

Editorial

You are given an integer N followed by N email addresses. Your task is to print a list containing only *valid* email addresses in lexicographical order.

Valid email addresses must follow these rules:

- It must have the *username@websitename.extension* format type.
- The username can only contain letters, digits, dashes and underscores.
- The website name can only have letters and digits.
- The maximum length of the extension is 3.

Concept

A *filter* takes a function returning *True* or *False* and applies it to a sequence, returning a list of only those members of the sequence where the function returned *True*. A *Lambda* function can be used with filters.

Let's say you have to make a list of the squares of integers from 0 to 9 (both included).

```
>> l = list(range(10))
>> l = list(map(lambda x:x*x, l))
```

Now, you only require those elements that are greater than 10 but less than 80.

```
>> l = list(filter(lambda x: x > 10 and x < 80, l))
```

Easy, isn't it?

Input Format

The first line of input is the integer N , the number of email addresses.
 N lines follow, each containing a string.

Constraints

Each line is a non-empty string.

Output Format

Output a list containing the valid email addresses in lexicographical order. If the list is empty, just output an empty list, [].

Sample Input

```
3
lara@hackerrank.com
brian-23@hackerrank.com
britts_54@hackerrank.com
```

Sample Output

['brian-23@hackerrank.com', 'britts_54@hackerrank.com', 'lara@hackerrank.com']

f t in

Submissions: [7776](#)

Max Score: 20

Difficulty: Medium

Rate This Challenge:

☆☆☆☆☆

[More](#)

Current Buffer (saved locally, editable)  

Python 3



```
1 def fun(s):
2     # return True if s is a valid email, else return False

4 ▶ def filter_mail(emails):↔
6
7 ▼ if __name__ == '__main__':
8     n = int(input())
9     emails = []
10 ▼ for _ in range(n):
11     emails.append(input())
12
13 filtered_emails = filter_mail(emails)
14 filtered_emails.sort()
15 print(filtered_emails)
```

Line: 4 Col: 1

 [Upload Code as File](#)

☐ Test against custom input

Run Code

Submit Code